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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,598	08/05/2003	Nicholas Jordan	1509-438	3784
22429	7590	11/02/2004	EXAMINER	
LOWE HAUPTMAN GILMAN AND BERNER, LLP			NGUYEN, CHAU N	
1700 DIAGONAL ROAD			ART UNIT	
SUITE 300 /310			PAPER NUMBER	
ALEXANDRIA, VA 22314			2831	

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/633,598

Applicant(s)

JORDAN ET AL.

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-23 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8-5-03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. Figures 1, 2A and 2B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "320", "332" and "324" at page 15. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the

sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: on page 17, reference numeral "404" is used for both "a flexible connector receiver" line 7 and "a ground plane" line 9. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the

subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-7, 9, 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP6-111634 (JP'634) in view of Dahlgren et al. (3,007,131).

JP'634 discloses a flexible electrical connector (Figure 1b) comprising first (13) and second (14) pluralities of spaced apart, elongate, signal carriers, an elongate current return conductor (12), and an insulator (12b), the first and second signal carriers being spaced apart from the return conductor by the insulator and extending substantially parallel to the return conductor, the second signal carriers being spaced from an opposite side of the return conductor to the first signal carriers by a further insulator. JP'634 does not disclose respective exposed end regions of said first and second pluralities of signal carriers and said current return conductor comprising respective, integrally formed contact regions thereof.

Dahlgren et al. discloses a flexible electrical connector comprising respective

exposed end regions (Figs 2 and 4) of first (15) and second (13) conductors and intermediate conductor (14) comprising respective, integrally formed contact regions thereof. It would have been obvious to one skilled in the art to apply the teaching of Dahlgren et al. in the connector of JP'634 to provide an electrical connection between the respective conductors to a connector receiver.

The modified connector of JP'634 also discloses one of the first and second signal carriers and return conductor extending longitudinally of the other and beyond a terminal end of the other so that en portions of the first and second signal carriers and return conductor being staggered in position longitudinally along the connector (re claim 3), the second signal carriers (see Dahlgren et al., #13) extending longitudinally of the connector beyond a terminal end of the first signal carriers (see Dahlgren et al., #15) (re claim 4), said second plurality of signal carriers extending longitudinally of said connector beyond a terminal and of said current return conductor (re claim 5), said second plurality of signal carriers extending longitudinally of said connector beyond a terminal end of said current return conductor (see Dahlgren et al., #14) (re claim 6), said current return conductor is at least as wide as a total width spanned by a wider one of the following: said first plurality of signal carriers, said second plurality of signal carriers (re claim 7), said connector has a positive location formation disposed at

one of the following: an edge of the connector, a side portion of the connector (re claim 9), the current return conductor is one of the following: a sheet of conducting material, a mesh of a conducting material (re claim 10). Re claims 2 and 21, it would have been obvious to one skilled in the art to use thin film tracks or metal tracks as the material for the first and second signal carriers of JP'634 since thin film tracks or metal tracks are known in the art for being used as signal carrying materials. Noted that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP'634 in view of Dahlgren et al. as applied to claim 1 above, and further in view of Argyrakis et al. (5,373,109).

Claim 8 additionally recites a terminal end of said second plurality of signal carriers being located at substantially the same longitudinal location as a terminal end of one of the following: said first plurality of signal carriers, said current return conductor. Argyrakis et al. discloses a flexible connector comprising second signal carriers (12) having a terminal end being located at substantially the same

longitudinal location as a terminal end of a current return conductor (22). It would have been obvious that depending on the configuration of the receiver, one skilled in the art would modify the second signal carriers of JP'634 to have terminal end as taught by Argyrakis et al. to provide a compatible connection between the cable and the connector.

8. Claims 11-15, 17-20, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'634 in view of Dahlgren et al. as applied to the claims above, and further in view of Yang (6,174,195).

The combination of JP'634 and Dahlgren et al. discloses the invention substantially as claimed except for a complimentary electrical connector receiver comprising a housing, first and second pluralities of signal contacts, and a current return conductor contact: each of said first and second pluralities of signal contacts being arranged to engage said respective contact regions of said first and second pluralities of signal carriers, each of said first plurality of signal contacts being configured so as to allow said connector to pass thereover so as to enable said current return conductor to contact said current return conductor contact. Yang discloses an electrical connector receiver (Figure 9) comprising a housing, first and second pluralities of signal contacts (43), and a current return conductor contact

(31): each of said first and second pluralities of signal contacts being arranged to engage contact regions of first and second pluralities of signal carriers, each of said first plurality of signal contacts being configured so as to allow said connector to pass thereover so as to enable current return conductor to contact said current return conductor contact. It would have been obvious to one skilled in the art to use the connector receiver taught by Yang with the flexible connector (a ribbon cable) of JP'634 to establish electrical connection with the ribbon cable.

Allowable Subject Matter

9. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Cited Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mori et al. discloses a connector receiver for ribbon cable.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chau N Nguyen
Primary Examiner
Art Unit 2831